# Commonwealth of Kentucky Division for Air Quality

## PERMIT APPLICATION SUMMARY FORM

Completed by: Lisa Beckham

GENERAL INFORMATION:	
Name:	Weyerhaeuser East Kentucky Plant
Address:	610 Trus Joist Ln
	Chavies KY, 41727
Date application received:	1/4/2008
SIC Code/SIC description:	2493, Reconstituted Wood Products
Source ID:	21-193-00097
Agency Interest:	3457
Activity:	APE20080001
Permit:	V-08-010
APPLICATION TYPE/PERMIT ACTIVITY	<u>Y</u> :
[ ] Initial issuance	[ ] General permit
[ ] Permit modification	[ ] Conditional major
Administrative	[X] Title V
Minor	[X] Synthetic minor
Significant	[X] Operating
[X] Permit renewal	[ ] Construction/operating
COMPLIANCE SUMMARY:	
[ ] Source is out of complian [X] Compliance certification	<u> •</u>
APPLICABLE REQUIREMENTS LIST:	
[ ] NSR	[X] NSPS [ ] SIP
[ ] PSD	[X] NESHAPS [ ] Other
[ ] Netted out of PSD/NSR	[ ] Not major modification per 401 KAR 51:001, 1(116)(b)
MISCELLANEOUS:	
[ ] Acid rain source	
[ ] Source subject to 112(r)	
	ılly enforceable emissions cap
	r alternative operating scenarios
[X] Source subject to a MAC	
	-case 112(g) or (j) determination
[ ] Application proposes new	
[X] Certified by responsible of	
[X] Diagrams or drawings in	
	ormation (CBI) submitted in application
[ ] Pollution Prevention Mea	
[ ] Area is non-attainment (li	st pollutants):

#### **EMISSIONS SUMMARY:**

Pollutant	Actual <sup>1</sup> (tpy)	Potential <sup>2</sup> (tpy)
PM/PM <sub>10</sub>	91.6/91.6	225 <sup>3</sup>
$SO_2$	6.83	35.6
$NO_X$	90.7	225 <sup>3</sup>
СО	195	225 <sup>3</sup>
VOC	40	195
Acetaldehyde	1.4	8.44
Chlorine	NA	19.36
Formaldehyde	3.13	13.38
Hydrogen Chloride	3.10	18.07
MDI	0.68	3.53
Methanol	3.03	11.31
Toluene	NA	2.93
Xylene	NA	2.13

<sup>&</sup>lt;sup>1</sup>Based on the 2007 KyEIS

### SOURCE DESCRIPTION:

On January 4, 2008 Weyerhaeuser submitted an application for a renewal permit for the Weyerhaeuser East Kentucky Plant in Chavies, Kentucky. Additional information was received on February 27, 2008, July 15, 2008, and August 13, 2008. The application was considered complete on August 18, 2008.

The Weyerhaeuser East Kentucky Plant produces Laminated Strand Lumber (LSL) using whole hardwood logs. In the LSL manufacturing process, the logs are debarked, cut to length, and processed into thin, long strands. The strands are then dried, coated with polyurethane MDI resin and emulsified wax, and formed into rough billets. The billets are pressed to a size approximately 8-ft wide by 48-ft long with various thicknesses in a steam injection press heated with thermal oil. The billets are then rough-sanded and dimensioned and prepared for shipment. LSL is used as a stable lumber "core" material for the window and door industry and as high-grade structural lumber for residential construction.

<sup>&</sup>lt;sup>2</sup>This potential may include fugitive emissions, which are not included when determining applicability of 401 KAR 51:017 or 401 KAR 52:020 to this source.

<sup>&</sup>lt;sup>3</sup>Potential based on a federally enforceable source-wide limit

With the renewal permit, the Boiler MACT (40 CFR 63 Subpart DDDD) requirements for EU 01 have been removed due to the vacature of the Boiler MACT by the U.S Court of Appeals on July 30, 2007. The PCWP MACT (40 CFR 63 Subpart DDDD) requirements for EU 02 have been incorporated into the permit, including operating limits set based on initial compliance demonstration results. The equipment associated with the I-Joist department of the facility has been removed from the permit, as the equipment has been shutdown and the process in no longer in operation (except for one remaining bundle saw, EU 22). Weyerhaeuser also requested that the 1,000 lb/wk limit of burning oil-soaked rags in EU 01 be increased to 2,000 lb/wk and be changed to allow the use of other absorbents (e.g. mulch and sawdust) to soak up oil spills. Based on the MSDS provided by Weyerhaeuser of the oils be clean up, the Division has agreed to the increase in the amount of oil-soaked absorbents burned.

#### **APPLICABLE REGULATIONS:**

401 KAR 59:010, New process operations, applicable to an emission unit that commenced on or after July 2, 1975.

401 KAR 59:015, New indirect heat exchangers, applicable to an emissions unit with a capacity of less than 250 MMBtu/hr which commenced on or after April 9, 1972.

40 CFR 60, Subpart Dc, Standards of performance for small industrial-commercial-institutional steam generating units, applies to each steam generating unit commenced after June 8, 1989 that has a maximum design heat input capacity between 10 and 100 MMBtu/hr.

40 CFR 63, Subpart DDDD, National Emission Standards for Hazardous Air Pollutants for Plywood and Composite Wood Products (PCWP), applies to each PCWP manufacturing facility located at a major source of HAP emissions.

40 CFR 64, Compliance Assurance Monitoring (CAM)

#### **NON-APPLICABLE REGULATIONS:**

401 KAR 51:017, Prevention of significant deterioration of air quality. The permittee has taken voluntary federally enforceable emission limitations to preclude the applicability of these standards.

## EMISSIONS AND OPERATING CAPS DESCRIPTIONS:

To preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, total source-wide emissions of carbon monoxide shall not exceed 225 tons per year based on a twelve month rolling total.

To preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, total source-wide emissions of nitrogen oxides shall not exceed 225 tons per year based on a twelve month rolling total.

To preclude the applicability of 401 KAR 51:017, Prevention of Significant Deterioration of Air Quality, total emissions of particulate matter from Emission Unit 01 and 02 shall not exceed 125 tons per year based on a twelve month rolling total.

To demonstrate compliance with these emission limitations, the twelve-month rolling totals shall be calculated monthly and reported semi-annually. The permittee shall maintain onsite a log of the 12-month rolling totals and make them available for review by the Division.